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U.S. PTO
**Sterne Kessler
Goldstein Fox**
ATTORNEYS AT LAW

Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millonig
Lawrence B. Bugaisky
Donald J. Featherstone
Michael V. Messinger

Judith U. Kim
Timothy J. Shea, Jr.
Patrick E. Garrett
Heidi L. Kraus
Edward W. Yee
Albert L. Ferro*
Donald R. Banowit
Peter A. Jackman
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Eldora Ellison Floyd
Thomas C. Fiala
Brian J. Del Buono
Virgil Lee Beaston
Kimberly N. Reddick
Theodore A. Wood

Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhullier
Rae Lynn Prengaman
Jane Shershenovich*
Lawrence J. Carroll*
George S. Bardmesser
Daniel A. Klein*
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller*
LuAnne M. DeSantis
John J. Figueroa
Ann E. Summerfield
Tiera S. Coston*
Aric W. Ledford*

Michael D. Specht
Jessica L. Parezo
Timothy A. Doyle*
Cynthia M. Bouchez
Nicole D. Dretar*
Ted J. Ebersole
Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Helene C. Carlson
Gaby L. Longsworth
Matthew J. Dowd
Aaron L. Schwartz
Mary B. Tung
Katrina Y. Pei Quach
Bryan L. Skelton
Robert A. Schwartzman

Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford
Eric D. Hayes
Michelle K. Holoubek
Robert H. DeSelms
Simon J. Elliott
Julie A. Heider
Mita Mukerjee
Scott M. Woodhouse
Of Counsel
Kenneth C. Bass III
Evan R. Smith
Marvin C. Guthrie
*Admitted only in Maryland
*Admitted only in Virginia
*Practice Limited to
Federal Agencies

February 19, 2004

WRITER'S DIRECT NUMBER:
(202) 772-8678

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Patent Application

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)
Appl. No. *To Be Assigned*; Filed: February 19, 2004
For: **Ceramic Nanocomposite Powders Reinforced With Carbon
Nanotubes and Their Fabrication Process**
Inventors: Hong *et al.*
Our Ref: 2236.0010000/JUK/SMW

17548 U.S. PTO
10/780863
021904

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

**Ceramic Nanocomposite Powders Reinforced With Carbon Nanotubes and
Their Fabrication Process**

and naming as inventors:

Soon Hyung Hong, Seung Il Cha, Kyung Tae Kim, Kyong Ho Lee and
Chan Bin Mo

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A specification containing:
 - i. 10 pages of description prior to the claims;

- ii. 2 pages of claims (9 claims);
- iii. a one (1) page abstract;
- c. 5 sheets of drawings: (Figures 1-2, 3, 4-5a, 5b-6a, and 6b); and
- 4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
- 5. Claim to Priority under 35 U.S.C. § 119(a)-(d);
- 6. A certified copy of Korean Patent Application No. 10-2003-0011815, filed February 25, 2003, priority of which is hereby claimed;
- 7. Two (2) return postcards; and
- 8. Form PTO-2038 Credit Card Payment Form in the amount of \$385.00 to cover the basic filing fee (37 C.F.R. § 1.16(a)).

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Judith U. Kim
Attorney for Applicants
Registration No. 40,679

Enclosures

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<p align="center">UTILITY PATENT APPLICATION TRANSMITTAL</p> <p><i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i></p>	Attorney Docket No.	2236.0010000/JUK/SMW
	First Inventor	Soon Hyung HONG
	Title	CERAMIC NANOCOMPOSITE POWDERS
	Express Mail Label No.	

<p align="center">APPLICATION ELEMENTS</p> <p><i>See MPEP chapter 600 concerning utility patent application contents.</i></p>	<p>ADDRESS TO:</p> <p>Mall Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450</p>
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1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 13]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 5]
5. Other or Declaration [Total Sheets]
- a. ☐ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
name in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (*Appendix*)
8. Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all necessary*)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(*when there is an assignee*)
11. ☐ English Translation Document (*if applicable*)
12. ☐ Information Disclosure ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(*Should be specifically itemized*)
15. ☒ Certified Copy of Priority Document(s)
(*if foreign priority is claimed*)
16. ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☒ Other: Authorization under 37CFR 1.136(a)(3)
The name of the assignee is: See 1 in Addendum

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

Prior application information: Examiner _____ Art Unit: _____
For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number: **26111** **OR** ☐ Correspondence address below

Name	Sterne, Kessler, Goldstein & Fox P.L.L.C.				
Address					
City		State		Zip Code	
Country		Telephone		Fax	
Name (Print/Type)	Judith U. Kim		Registration No. (Attorney/Agent)		40,679
Signature	<i>Judith U. Kim</i>		Date		February 19, 2004

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Addendum

1. Korea Advanced Institute of Science and Technology

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 385.00

Complete if Known

Application Number	To Be Assigned
Filing Date	February 19, 2004
First Named Inventor	Soon Hyung Hong
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	2236.0010000/JUK/SMW

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None

☐ *Charge any deficiencies or credit any overpayments in Deposit Account: the fees to Deposit Acct. No. 19-0036.

Deposit Account Number 19-0036

Deposit Account Name Sterne Kessler, Goldstein & Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	385
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ 385.00)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		Extra Claims		Fee from below	Fee Paid
Independent	9	- 20	**=	X	
Multiple Dependent	1	- 3	**=	X	

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple dependent claim, if not paid	
1204	86	2204	43	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$ 0.00)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Judith U. Kim	Registration No. (Attorney/Agent)	40,679	Telephone	(202) 371-2600
Signature	Judith U. Kim	Date	February 19, 2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

231235.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hong *et al.*

Appl. No.: *To Be Assigned*

Filed: February 19, 2004

For: **Ceramic Nanocomposite Powders
Reinforced With Carbon
Nanotubes and Their Fabrication
Process**

Confirmation No.: *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 2236.0010000/JUK/SMW

**Authorization to Treat a Reply as Incorporating an
Extension of Time Under 37 C.F.R. § 1.136(a)(3)**

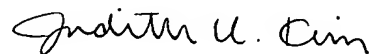
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Judith U. Kim
Attorney for Applicants
Registration No. 40,679

Date: February 19, 2004

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600